
3611 South Harbor Boulevard
Suite 260
Santa Ana, CA 92704
731.431.4100
Fax 714.825.0685



March 29, 2002

Mr. Roger Baker
Principal Planner
CITY OF BURBANK
275 East Olive Avenue
Burbank, California 91502

Clayton Project No. 80-98191.00

Subject: Status Report of Vapor Extraction System Operation - Lockheed-Martin
B-1 Site – November 2001 through January 2002

Dear Mr. Baker:

The following status report has been prepared by Clayton Group Services, Inc. (Clayton) for the Vapor Extraction System (VES) operation at Lockheed-Martin B-1 Site for the period between October 20 , 2001 and January 28, 2002. It includes the following items:

- Background
- Clayton Field Activities
- Results of Laboratory Analysis
- Health Risk Assessment Calculations
- Conclusions

BACKGROUND

Alton Geoscience conducted a "Phase I" and "Phase II" of VES effluent sampling and health risk assessment for the Lockheed-Martin B-1 facility. Phase I consisted of twelve weekly health risk reports based on samples collected between September 2, 1997 and February 9, 1998. Phase II included twelve bi-weekly health risk assessments based on samples collected between February 16, 1998 and September 9, 1998. Phase III consisted of monthly sampling between October and December 1998.

Mr. Roger Baker
CITY OF BURBANK
March 29, 2002

Page 2 of 5
Clayton Project No. 80-98191.00

Phase IV of the VES effluent sampling consists of VES effluent sample acquisition, laboratory analyses, and health risk assessments to be performed once per quarter for the remainder of the project. The first and second quarterly health risk assessments were provided by Alton in reports dated January 18, 1999 and May 24, 1999, respectively.

Clayton conducted the third quarter sampling and risk assessment, then provided the results in a report dated November 1, 1999. Seven additional reports were submitted by Clayton. These reports were dated:

- November 23, 1999, which addressed the temporary shutdown of the system on October 14, 1999 for rebound testing;
- March 13, 2000, for the period following restart of the system;
- May 16, 2000 for the period through March 2000;
- March, July 12, 2000 for the period through June 2000, and
- November 17, 2000, for the period through September 2000.
- February 22, 2001, for the period through January 2001
- May 31, 2001, for the period through April 2001
- August 21, 2001, for the period through August 5, 2001
- November 12, 2001 for the period through October 19, 2001

CLAYTON FIELD ACTIVITIES

On January 28, 2002 personnel from Clayton met with Earth Tech personnel to conduct sampling of air emissions at the Lockheed-Martin B-1 Site VES. Clayton and Earth Tech personnel each collected an exhaust sample using an evacuated Summa canister, connected via a disposable Teflon® tube to the VES unit's sampling port.

During the sampling period, the exhaust flow rate of 1,200 scfm and volatile organic compound (VOC) monitoring a single reading of 0.59 was recorded. The second stack analyzer was not operational due to repairs on the heater unit. The VOC reading was within acceptable operating conditions for the VES. The 15 minute and 24 hour average VOC emissions rates indicated at the time were 0.5664 and 0.3606 lbs/day, respectively.

Mr. Roger Baker
CITY OF BURBANK
March 29, 2002

Page 3 of 5
Clayton Project No. 80-98191.00

The sample collected by Clayton was delivered to Air Toxics LTD in Folsom, California for analysis by gas-chromatograph/mass spectrometry (GS/MS) in accordance with EPA Method TO-14.

RESULTS OF LABORATORY ANALYSES

The results from the TO-14 analysis of the sample taken on January 28, 2002 indicated that only six (6) compounds were present in concentrations above detection limits. Following are a list of these compounds and the concentrations indicated by the analysis:

Compound	Concentration (ppmv) ¹
Dichlorodifluoromethane (Freon 12)	0.016
1,1-Dichloroethylene	0.0043
Perchloroethylene (PCE)	0.250
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0029
Methylene chloride	0.002
Trichloroethylene (TCE)	0.070

¹ ppmv = parts per million by volume

These results are significantly lower than those from the previous quarter, with the TCE concentration one fifth of the October 2001 level (0.070 versus 0.340 ppmv). These concentrations are now approaching those observed during both 1998 and 1999.

Using the analytical data, an overall VOC emission rate of 0.241 lb/day was calculated. This value correlates well with the previously discussed 24 hour average VOC reading (0.3606 lbs/day) provided by the continuous monitoring system. This calculated VOC emission level is well below the Conditional Use Permit (CUP) limit of 9.8 pounds per day. This result along, with the previous calculated total VOC emissions for the unit, were plotted on Figure 1. Vinyl chloride was not detected in the sample taken. Therefore, its CUP limit of 0.14 pounds per day was not exceeded.

Mr. Roger Baker
CITY OF BURBANK
March 29, 2002

Page 4 of 5
Clayton Project No. 80-98191.00

HEALTH RISK ASSESSMENT CALCULATIONS

In accordance with the CUP, the stack concentrations of each constituent and the exhaust flow rates were used to calculate the excess cancer risk resulting from operation of the VES. The first risk calculation was to determine the risk if the unit was operated for a lifetime period of 70 years, evaluating the risk to both workers and local residents for those chemicals specified in SCAQMD Rule 1401, as adopted at the time the unit was permitted. The second risk calculation was to determine the risk to both workers and local residents for the life of the project (the 8.5 year operating period), for all detected chemicals for which carcinogenic risk factors are available.

The resulting cancer risk calculations for both conditions indicated an acceptable Maximum Individual Cancer Risk (MICR) significantly less than one in one million. The results from these calculations, along with the MICR results from previous calculations for the unit, are presented on Figures 2 and 3, for 70 year and 8.5 year calculations respectively.

CONCLUSIONS

Based on the results of the information gathered and samples taken on January 28, 2002, the following conclusions can be made:

VOC emissions from the VES are well below the CUP limit of 9.8 pounds per day. Since vinyl chloride was not detected, its CUP limit of 0.14 pounds per day was not exceeded.

Excess cancer risks (MICR) were less than one in one million for workers and local residents, using both 70 year lifetime and 8.5 year operating period risk calculations. VOC emission rates have had significant fluctuations during the last two year period but remain well below those during the initial startup of the unit. These levels may be a result of eventual desiccation (drying) of clay layers due to constant long term air flow resulting in the increased volatilization of VOC components, particularly TCE and PCE. In any case, it appears the system is just doing its job removing underground contaminants. The fluctuations may continue for some time but should eventually reach an asymptotic level as residual contaminant levels are reached.

Mr. Roger Baker
CITY OF BURBANK
March 29, 2002

Page 5 of 5
Clayton Project No. 80-98191.00

If you have any questions or require additional information regarding this status report, please contact me at (714) 431-4157 or Gustavo Valdivia at (714) 431-4113.

Sincerely,



Martin L. McClintock, P.E. No. 5025
Project Engineer
Environmental Services

Attachments: Figure 1 - Daily VOC Emissions
Figure 2 - Human Health Risk (70 Year Lifetime)
Figure 3 - Human Health Risk (8.5 Year Operating Period)
Laboratory Report

cc: Ms. Stacey Ebner, South Coast Air Quality Management District
George Illes, South Coast Air Quality Management District

FIGURE 1 - DAILY VOC EMISSIONS
LOCKHEED B-1 VES
Independent Monitoring Data

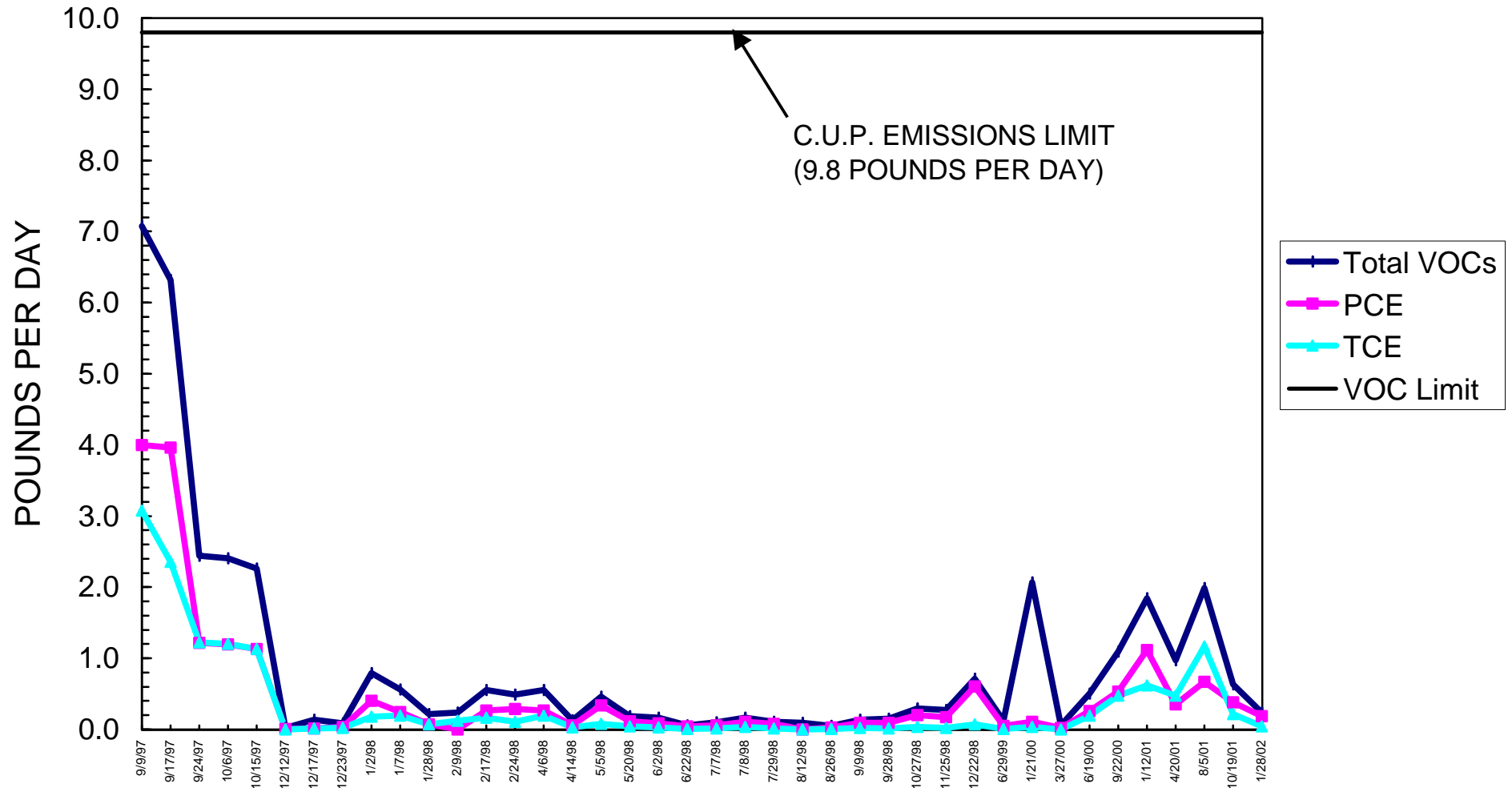


FIGURE 1

FIGURE 2 - HUMAN HEALTH RISK
LOCKHEED B-1 VES
SCAQMD RULE 1401 CHEMICALS
HYPOTHETICAL 70 YEAR LIFETIME

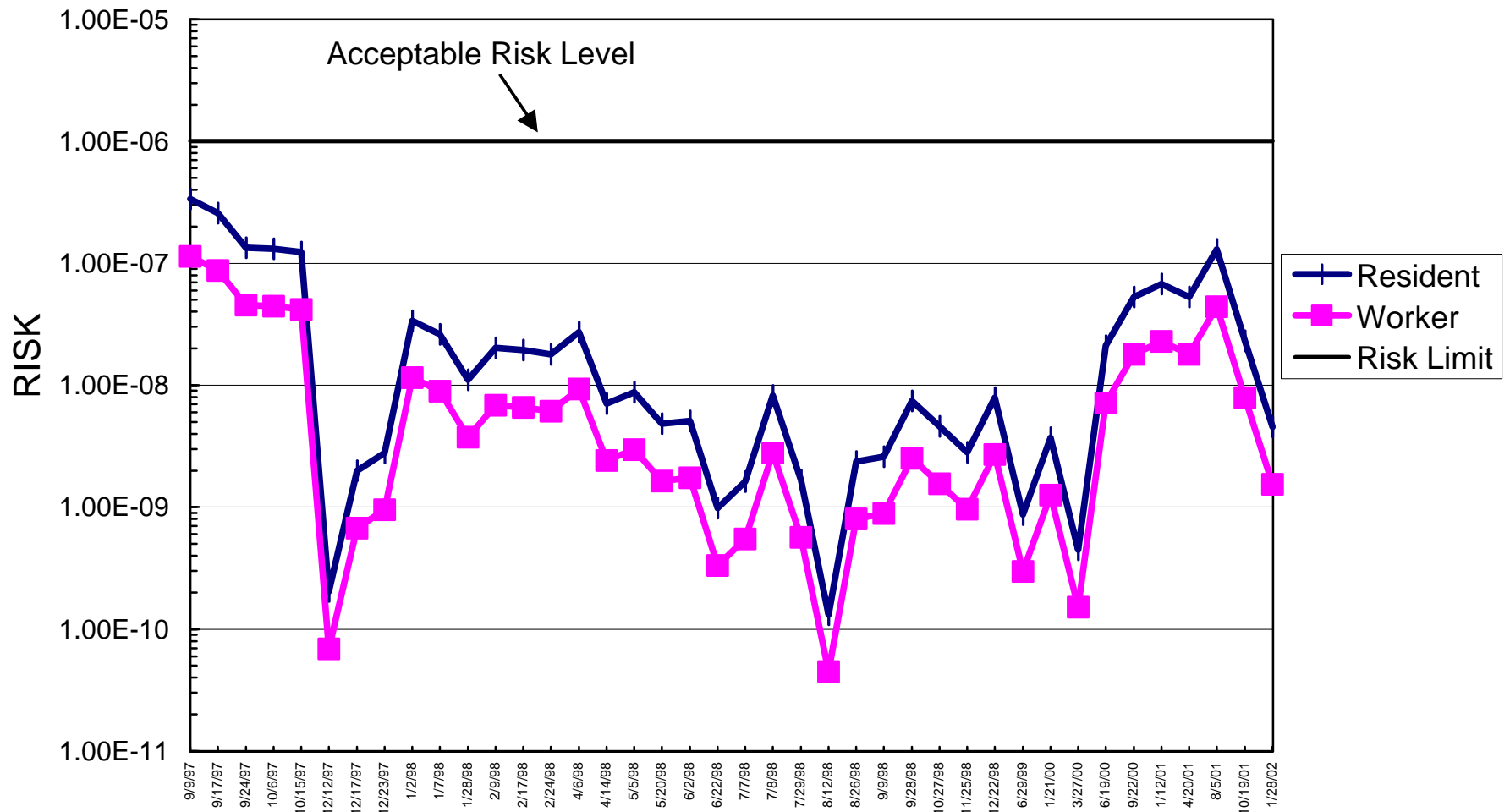


FIGURE 2

**FIGURE 3 - HUMAN HEALTH RISK
LOCKHEED B-1 VES
DURING 8.5 YEAR OPERATING PERIOD**

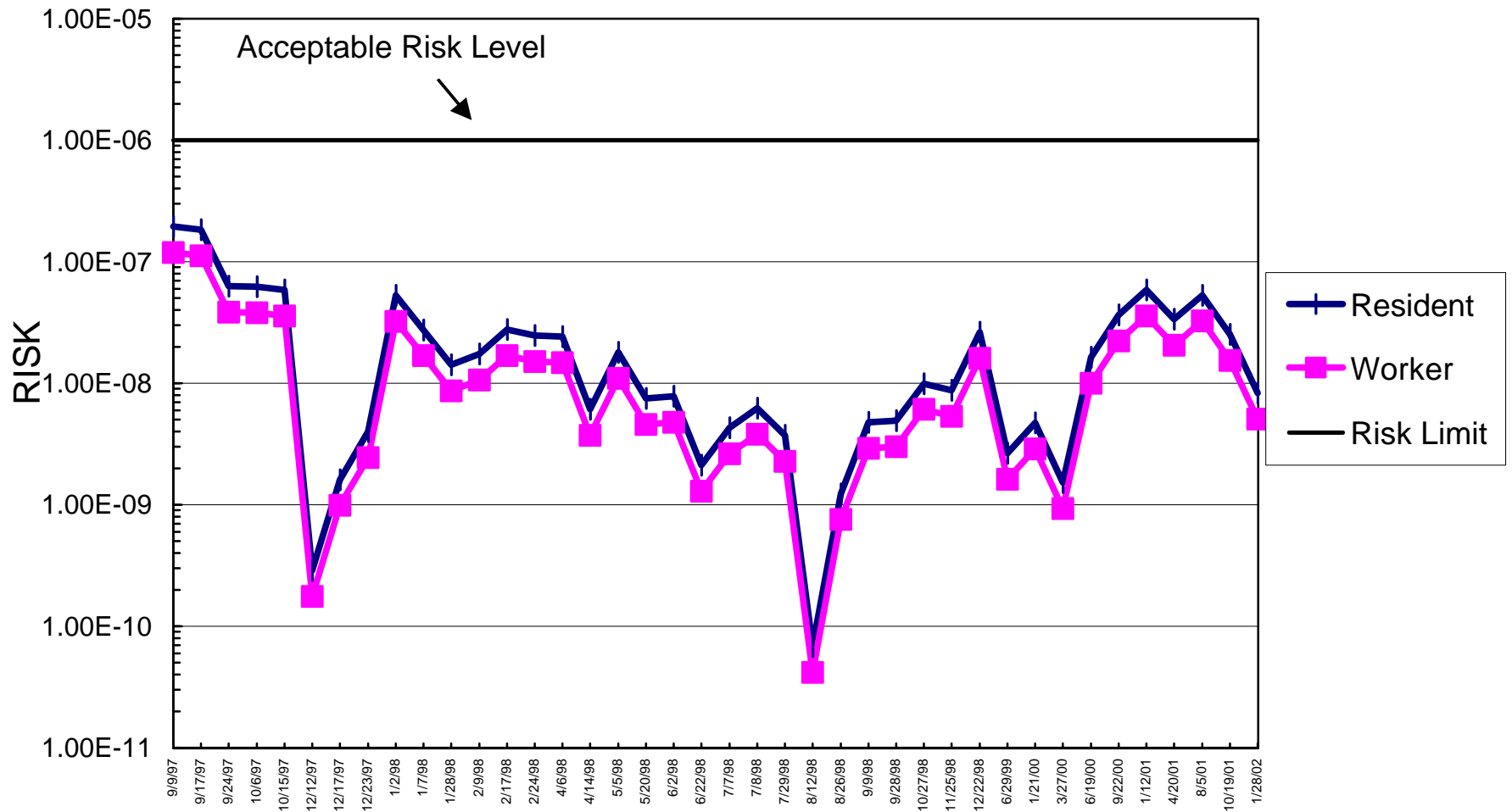


FIGURE 3



AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0201580

Work Order Summary

CLIENT:	Mr. Bill Gendron Clayton Group Services 3611 S Harbor Boulevard #260 Santa Ana, CA 92704	BILL TO:	Mr. Bill Gendron Clayton Group Services 3611 S Harbor Boulevard #260 Santa Ana, CA 92704
PHONE:	714-431-4100	P.O. #	8098191
FAX:	714-825-0685	PROJECT #	8098191 City of Burbank
DATE RECEIVED:	1/31/02	CONTACT:	Lisa Argento
DATE COMPLETED:	2/14/02		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>
01A	B-1-VES-1-28-02	TO-14	3.5 "Hg
02A	Lab Blank	TO-14	NA
03A	LCS	TO-14	NA

CERTIFIED BY:

Laboratory Director

DATE: 02/14/02

Certification numbers: CA ELAP - 1149, NY ELAP - 11291, UT ELAP - E-217, AZ ELAP - AZ0567, LA - AI 30763
Name of Accrediting Agency: NELAP/State of New York Department of Health, Scope of Accreditation : Non Potable Water
Accreditation number :11291, Effective date: 6/7/01, Expiration date: 4/1/02

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards
This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE

TO-14

Clayton Environmental

Workorder# 0201580

One 6 Liter Summa Canister sample was received on January 31, 2002. The laboratory performed analysis via EPA Method TO-14 using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

During the five point calibration, two low-level standards are used. The low-level standard for TO-14 compounds is spiked at 0.5 ppbv and represents the reporting limit for these compounds. The low-level standard for the non-TO-14 compounds is spiked at 2.0 ppbv and represents the reporting limit for these compounds. The TO-14 compounds are present in both standards but are excluded from reporting in the 2.0 ppbv standard since a lower level is already included in the curve.

Method modifications taken to run these samples include:

<i>Requirement</i>	<i>TO-14</i>	<i>ATL Modifications</i>
Internal standard retention times.	Not specified.	Within 0.50 minutes of most recent daily CCV internal standards
Internal standard recoveries.	Not specified.	Within 40% of the daily CCV internal standard area for blanks and samples.
Initial calibration criteria.	Not specified.	RSD of 30% or less for standard compounds, 40% or less for non-standard and polar compounds
Continuing calibration verification criteria	Not specified.	70 - 130% for at least 90% of standard compounds, 60 - 140% for at least 80% of non-standard and polar compounds
Response factor for quantitation.	Average response factor (ICAL).	Average response factor (ICAL).

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit(background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

N - The identification is based on presumptive evidence.

AIR TOXICS LTD.

SAMPLE NAME: B-1-VES-1-28-02

ID#: 0201580-01A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	g020614	Date of Collection: 1/28/02
Dil. Factor:	2.03	Date of Analysis: 2/6/02

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	1.0	5.1	16	78
Freon 114	1.0	7.2	Not Detected	Not Detected
Chloromethane	1.0	2.1	Not Detected	Not Detected
Vinyl Chloride	1.0	2.6	Not Detected	Not Detected
Bromomethane	1.0	4.0	Not Detected	Not Detected
Chloroethane	1.0	2.7	Not Detected	Not Detected
Freon 11	1.0	5.8	Not Detected	Not Detected
1,1-Dichloroethene	1.0	4.1	4.3	18
Freon 113	1.0	7.9	2.9	22
Methylene Chloride	1.0	3.6	2.0	7.2
1,1-Dichloroethane	1.0	4.2	Not Detected	Not Detected
cis-1,2-Dichloroethene	1.0	4.1	Not Detected	Not Detected
Chloroform	1.0	5.0	Not Detected	Not Detected
1,1,1-Trichloroethane	1.0	5.6	Not Detected	Not Detected
Carbon Tetrachloride	1.0	6.5	Not Detected	Not Detected
Benzene	1.0	3.3	Not Detected	Not Detected
1,2-Dichloroethane	1.0	4.2	Not Detected	Not Detected
Trichloroethene	1.0	5.5	70	380
1,2-Dichloropropane	1.0	4.8	Not Detected	Not Detected
cis-1,3-Dichloropropene	1.0	4.7	Not Detected	Not Detected
Toluene	1.0	3.9	Not Detected	Not Detected
trans-1,3-Dichloropropene	1.0	4.7	Not Detected	Not Detected
1,1,2-Trichloroethane	1.0	5.6	Not Detected	Not Detected
Tetrachloroethene	1.0	7.0	250	1700
Ethylene Dibromide	1.0	7.9	Not Detected	Not Detected
Chlorobenzene	1.0	4.7	Not Detected	Not Detected
Ethyl Benzene	1.0	4.5	Not Detected	Not Detected
m,p-Xylene	1.0	4.5	Not Detected	Not Detected
o-Xylene	1.0	4.5	Not Detected	Not Detected
Styrene	1.0	4.4	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	1.0	7.1	Not Detected	Not Detected
1,3,5-Trimethylbenzene	1.0	5.1	Not Detected	Not Detected
1,2,4-Trimethylbenzene	1.0	5.1	Not Detected	Not Detected
1,3-Dichlorobenzene	1.0	6.2	Not Detected	Not Detected
1,4-Dichlorobenzene	1.0	6.2	Not Detected	Not Detected
Chlorotoluene	1.0	5.3	Not Detected	Not Detected
1,2-Dichlorobenzene	1.0	6.2	Not Detected	Not Detected
1,2,4-Trichlorobenzene	1.0	7.6	Not Detected	Not Detected
Hexachlorobutadiene	1.0	11	Not Detected	Not Detected
Propylene	4.1	7.1	Not Detected	Not Detected
1,3-Butadiene	4.1	9.1	Not Detected	Not Detected
Acetone	4.1	9.8	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: B-1-VES-1-28-02

ID#: 0201580-01A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	g020614	Date of Collection: 1/28/02
Dil. Factor:	2.03	Date of Analysis: 2/6/02

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	4.1	13	Not Detected	Not Detected
2-Propanol	4.1	10	Not Detected	Not Detected
trans-1,2-Dichloroethene	4.1	16	Not Detected	Not Detected
Vinyl Acetate	4.1	14	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.1	12	Not Detected	Not Detected
Hexane	4.1	14	Not Detected	Not Detected
Tetrahydrofuran	4.1	12	Not Detected	Not Detected
Cyclohexane	4.1	14	Not Detected	Not Detected
1,4-Dioxane	4.1	15	Not Detected	Not Detected
Bromodichloromethane	4.1	28	Not Detected	Not Detected
4-Methyl-2-pentanone	4.1	17	Not Detected	Not Detected
2-Hexanone	4.1	17	Not Detected	Not Detected
Dibromochloromethane	4.1	35	Not Detected	Not Detected
Bromoform	4.1	43	Not Detected	Not Detected
4-Ethyltoluene	4.1	20	Not Detected	Not Detected
Ethanol	4.1	7.8	Not Detected	Not Detected
Methyl tert-Butyl Ether	4.1	15	Not Detected	Not Detected
Heptane	4.1	17	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	80	70-130
4-Bromofluorobenzene	96	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0201580-02A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	g020606	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/6/02

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.50	2.5	Not Detected	Not Detected
Freon 114	0.50	3.6	Not Detected	Not Detected
Chloromethane	0.50	1.0	Not Detected	Not Detected
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Bromomethane	0.50	2.0	Not Detected	Not Detected
Chloroethane	0.50	1.3	Not Detected	Not Detected
Freon 11	0.50	2.8	Not Detected	Not Detected
1,1-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Freon 113	0.50	3.9	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Carbon Tetrachloride	0.50	3.2	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
1,2-Dichloropropane	0.50	2.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
Toluene	0.50	1.9	Not Detected	Not Detected
trans-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
1,1,2-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
Ethylene Dibromide	0.50	3.9	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
Ethyl Benzene	0.50	2.2	Not Detected	Not Detected
m,p-Xylene	0.50	2.2	Not Detected	Not Detected
o-Xylene	0.50	2.2	Not Detected	Not Detected
Styrene	0.50	2.2	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.50	3.5	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,3-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
Chlorotoluene	0.50	2.6	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.50	3.8	Not Detected	Not Detected
Hexachlorobutadiene	0.50	5.4	Not Detected	Not Detected
Propylene	2.0	3.5	Not Detected	Not Detected
1,3-Butadiene	2.0	4.5	Not Detected	Not Detected
Acetone	2.0	4.8	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0201580-02A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	g020606	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/6/02

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
2-Propanol	2.0	5.0	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
Vinyl Acetate	2.0	7.2	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Hexane	2.0	7.2	Not Detected	Not Detected
Tetrahydrofuran	2.0	6.0	Not Detected	Not Detected
Cyclohexane	2.0	7.0	Not Detected	Not Detected
1,4-Dioxane	2.0	7.3	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
2-Hexanone	2.0	8.3	Not Detected	Not Detected
Dibromochloromethane	2.0	17	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
4-Ethyltoluene	2.0	10	Not Detected	Not Detected
Ethanol	2.0	3.8	Not Detected	Not Detected
Methyl tert-Butyl Ether	2.0	7.3	Not Detected	Not Detected
Heptane	2.0	8.3	Not Detected	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	83	70-130
4-Bromofluorobenzene	90	70-130

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0201580-03A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	g020603	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/6/02

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	%Recovery
Freon 12	0.50	2.5	88
Freon 114	0.50	3.6	89
Chloromethane	0.50	1.0	78
Vinyl Chloride	0.50	1.3	87
Bromomethane	0.50	2.0	101
Chloroethane	0.50	1.3	92
Freon 11	0.50	2.8	90
1,1-Dichloroethene	0.50	2.0	85
Freon 113	0.50	3.9	82
Methylene Chloride	0.50	1.8	82
1,1-Dichloroethane	0.50	2.0	94
cis-1,2-Dichloroethene	0.50	2.0	81
Chloroform	0.50	2.5	87
1,1,1-Trichloroethane	0.50	2.8	90
Carbon Tetrachloride	0.50	3.2	85
Benzene	0.50	1.6	82
1,2-Dichloroethane	0.50	2.0	88
Trichloroethene	0.50	2.7	82
1,2-Dichloropropane	0.50	2.3	99
cis-1,3-Dichloropropene	0.50	2.3	100
Toluene	0.50	1.9	82
trans-1,3-Dichloropropene	0.50	2.3	98
1,1,2-Trichloroethane	0.50	2.8	91
Tetrachloroethene	0.50	3.4	88
Ethylene Dibromide	0.50	3.9	110
Chlorobenzene	0.50	2.3	84
Ethyl Benzene	0.50	2.2	87
m,p-Xylene	0.50	2.2	94
o-Xylene	0.50	2.2	103
Styrene	0.50	2.2	98
1,1,2,2-Tetrachloroethane	0.50	3.5	89
1,3,5-Trimethylbenzene	0.50	2.5	92
1,2,4-Trimethylbenzene	0.50	2.5	85
1,3-Dichlorobenzene	0.50	3.0	74
1,4-Dichlorobenzene	0.50	3.0	73
Chlorotoluene	0.50	2.6	86
1,2-Dichlorobenzene	0.50	3.0	72
1,2,4-Trichlorobenzene	0.50	3.8	51 Q
Hexachlorobutadiene	0.50	5.4	53 Q
Propylene	2.0	3.5	98
1,3-Butadiene	2.0	4.5	108
Acetone	2.0	4.8	96

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0201580-03A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	g020603	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/6/02

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	%Recovery
Carbon Disulfide	2.0	6.3	104
2-Propanol	2.0	5.0	102
trans-1,2-Dichloroethene	2.0	8.0	96
Vinyl Acetate	2.0	7.2	118
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	103
Hexane	2.0	7.2	90
Tetrahydrofuran	2.0	6.0	103
Cyclohexane	2.0	7.0	87
1,4-Dioxane	2.0	7.3	102
Bromodichloromethane	2.0	14	97
4-Methyl-2-pentanone	2.0	8.3	94
2-Hexanone	2.0	8.3	107
Dibromochloromethane	2.0	17	107
Bromoform	2.0	21	104
4-Ethyltoluene	2.0	10	95
Ethanol	2.0	3.8	105
Methyl tert-Butyl Ether	2.0	7.3	92
Heptane	2.0	8.3	91

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	87	70-130
4-Bromofluorobenzene	108	70-130



AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

Notwithstanding signature on this document, indicators that sample is being shipped in compliance with all applicable local, state, federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Notwithstanding signature also indicated agreement to hold Air Toxics, Ltd., and indirectly Air Toxics Limited against any claim, demand, or action of any kind related to the collection, handling or shipping of samples. (A.O.T. Profile (000) 467-4922)

180 BLUE RAVINE ECAD. SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Page 01

Contact Person Robert A. Martin
Company Playbox Knowledge Services
Address 4307 Folsom Blvd. Suite 100
Phone 714 451-4100 FAX 714 825-0825
Collected By: Signature [Signature]

Project Info:
P.O. # 0096191
Project # 11
Project Name Army of Surbank

Turn Around Time:

☒ Normal
☐ Rush Specify 2/13/02

Lab ID	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
--------	-------------------	-------------	--------------------	------------------------------------	-------	---------

-018	E-1-VES-12802	1/28/02-1015	TO 141	26.5	1	3.54H2g
------	---------------	--------------	--------	------	---	---------

Received By: Signature [Signature] Date/Time 1/28/02 1200

Received By: Signature [Signature] Date/Time 1/28/02 1200

Received By: Signature [Signature] Date/Time 1/28/02 1200

Received By: Signature [Signature] Date/Time 1/28/02 1200

Received By: Signature [Signature] Date/Time 1/28/02 1200

Shipper Name Edex Air Bill # 8888888888 Opened By: CS Temp. (°C) - Condition Good Canister Seals Intact? Yes No None Work Order # 0201580